



# United States Department of the Interior

## FISH AND WILDLIFE SERVICE

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IN REPLY REFER TO:

SEP 24 1993

### Memorandum

To: Deputy Regional Director, Region 1  
Portland, Oregon

From: <sup>Ading</sup> Assistant Regional Director-Ecological Services  
Portland, Oregon

Subject: Findings and Recommendations to Issue a Section 10(a)(1)(B)  
Incidental Take Permit for Northern Spotted Owls on Murray Pacific  
Corporation Lands, Lewis County, Washington (PRT-777837)

#### I. DESCRIPTION OF PROPOSAL

The Murray Pacific Corporation (Murray) proposes to harvest approximately 2,430 acres of northern spotted owl (Strix occidentalis caurina) suitable habitat within 1.8 miles of known activity centers on or near their 54,610 acres of land in Lewis County, Washington. The proposed timber harvest would result in the loss of suitable owl habitat and the take of northern spotted owls. Murray developed a Habitat Conservation Plan (HCP), in support of an application for a permit under section 10(a)(1)(B) of the Endangered Species Act of 1973 (16 U.S.C. 1531-1544), as amended (Act), which would allow for the authorized, incidental take of northern spotted owls as a result of the proposed project. The HCP is designed to minimize and mitigate the incidental take of spotted owls and loss of their habitat, and to further the conservation of the species, and outlines measures to ensure that these actions are implemented in a timely manner.

The permit, HCP, and Implementation Agreement (IA) delineate the responsibilities of the U.S. Fish and Wildlife Service (Service) and Murray, and are designed to allow the harvest of timber in such a way as to result in conservation of the spotted owl. The permit would authorize Murray to incidentally take northern spotted owls during timber harvest operations on their land in Lewis County, Washington. The permit, HCP, and IA would be in effect for a period of 100 years. Permit issuance would allow Murray to resume harvest of suitable spotted owl habitat within owl activity circles. Approximately 2,430 acres of resident owl habitat (habitat used for nesting, roosting, and foraging) within 1.8 miles of known activity centers would be harvested by 2003, and owls residing in them may be displaced. Three owls (one pair and one resident single) known to currently reside on the ownership are the only owls expected to be displaced (1,893 acres harvested in two circles); however, the risk of take extends to additional owls using eight activity centers on or near the ownership which would lose a combined total of 476 acres of suitable habitat. The permit would authorize the incidental take

of up to 20 individual resident spotted owls for the first 10 years of the permit from activities associated with timber harvest due to owl habitat loss and disruption. This total number assumes complete pair occupancy of 10 site centers: two located entirely within Murray lands in the Mineral Block, seven within 1.8 miles of Murray lands, and one site center beyond 1.8 miles but within 2.5 miles of Murray lands that have the potential to move onto or immediately adjacent to Murray lands during the life of the project. In addition, 10 owls may be taken each succeeding decade until 2093 even though nearly all suitable habitat will be gone after the first decade of HCP implementation. This situation is highly unlikely. However, successful owl nests have been documented in marginal habitats not normally considered as suitable for successful nesting.

Under the HCP, the incidental take of spotted owls will be minimized and mitigated. Minimization of incidental take will occur by seasonal protection of any future spotted owl nest sites found on Murray's land. Although no such sites currently exist, Murray will survey forest stands on its ownership that have potential for spotted owl nesting, and not allow any harvest or alteration of suitable habitat within 1/4 mile of an active nest site from 1 March through 30 September. Murray will provide mitigation by maintaining habitat reserves, and managing their entire 54,610 acre land ownership in Lewis County, Washington to provide dispersal habitat for juvenile spotted owls. Under the permit and HCP, Murray will establish and maintain 1,222 acres of habitat reserves free from timber harvesting, and manage their entire ownership to increase the amount of owl dispersal habitat from the current level of 11,412 acres to approximately 23,233 acres by the year 2043. Dispersal habitat will be maintained at an average of 23,000 acres through 2093. The amount of gap between stands of dispersal habitat (areas beyond 1/4 miles from dispersal habitat stands) will be managed to decrease from the current area of 25,556 acres to 8,720 acres by 2043, and be maintained at this level through 2093. In addition, the distribution of owl dispersal habitat across the landscape of the Murray ownership will be improved and maintained over the term of the permit and HCP. Habitat for dispersing owls will be provided by silviculturally manipulating commercial forest stands to produce structural characteristics important to dispersing owls. The HCP provides for dispersal habitat, well distributed over the 54,610 acres of Murray's ownership, that will aid in dispersal of juvenile owls between Habitat Conservation Areas (HCA) to the west and east of the Murray property. Providing dispersal habitat in this area should also assist in owl movement between populations on the Olympic Peninsula and the Cascade Mountains of Washington. The HCP establishes a monitoring process to track permit compliance and an amendment process to address unforeseen events. Funding for the HCP will come from revenues generated by the harvest and sale of commercial timber on the ownership, and will be assured because the permit and HCP will become a covenant running with the land in the nature of an encumbrance, binding Murray and any possible successor to their terms.

#### ANALYSIS OF EFFECTS

The Service has determined that the incidental take of spotted owls, and the loss of suitable habitat associated with the issuance of the permit to Murray would be mitigated to the level of insignificance by the measures described in

the HCP. Issuance of the permit would result in the loss of approximately 2,430 acres of suitable owl habitat within activity circles centered on and near the Murray ownership. Dispersal habitat is a recovery goal identified in the Draft Recovery Plan for the northern spotted owl, for the area which includes Murray's ownership. As discussed above, the HCP provides for dispersal habitat, well distributed over the 54,610 acres of Murray's ownership, that will aid in dispersal of juvenile owls between HCAs to the west and east of the Murray property. Providing dispersal habitat in this area should also assist in owl movement between populations on the Olympic Peninsula and the Cascade Mountains of Washington.

Another recovery goal identified in the Draft Recovery Plan recommends that private land in the vicinity of HCA WD-10 (located primarily on Federal lands along the western boundary of the Murray ownership) contribute to resident owl habitat and the increase and maintenance of a viable breeding population of owls for the HCA. There are three owls that are known to occur in activity circles centered on the Murray ownership, and that are expected to be displaced if timber harvest is permitted under the permit and HCP. The impacts to these owls are expected to be the most significant effect that will result from issuing the permit. These three owls occur in two circles that are both below the minimum level of suitable habitat (40%) believed necessary to support reproductive owls. In addition, the suitable habitat that is remaining is highly fragmented and of marginal quality. Since Murray can continue harvesting timber in non-suitable owl habitat within active owl circles, the amount of suitable habitat available to these owls is not expected to increase significantly in the future. Should the owls eventually abandon their circles, Murray would be free to harvest suitable habitat within the circles, which would further degrade the area for resident spotted owls. While the loss of suitable habitat within the circle of the resident single owl will likely assure the loss of a potential breeding pair for HCA WD-10, the resident pair that will likely be displaced, are located approximately 12 miles from the HCA. Due to the distance from the HCA, it is highly questionable if this pair would contribute to the HCA WD-10 population even if they eventually reproduced. The potential for continued occupancy of the Murray ownership by resident owls is low even with protection of all existing suitable habitat, due to habitat quantity and quality. The remaining owls within the eight other circles are unlikely to be displaced due to the small amount of suitable habitat on Murray's property that would be removed. In summary, the minimization and mitigation measures specified under the HCP are adequate to offset the loss of suitable habitat and will contribute to the conservation of the northern spotted owl.

## II. PUBLIC COMMENT

The Service published a notice of availability of an Environmental Assessment (EA) and receipt of an application for a permit to allow incidental take of the threatened northern spotted owl, by Murray Pacific Corporation, Lewis County, Washington, in the Federal Register on June 11, 1993. Publication of the notice initiated a 30-day comment period, which closed on July 11, 1993. Copies of the EA, HCP, and IA were mailed to the Washington Congressional delegation, Federal and State government agencies, County and City

governments, environmental organizations, and the news media listed in the EA. Copies of these documents were also sent to 29 other interested individuals and/or groups as a result of requests the Service received after publication in the Federal Register.

The Service received comments from: the Washington State Department of Wildlife and Department of Natural Resources; Washington Forest Protection Association; and Mr. James Alto, Spokane Tribe of Indians. Substantive comments are summarized and addressed below:

1. A comment was received that statements in the documents referring to habitat reserves being no-harvest areas, and wetland protection acreage under the Washington State Forest Practices Rules were inaccurate. The Service reviewed the documents and modified the HCP and EA to address the inaccuracies.
2. Two comments were received indicating that providing dispersal habitat for 100 years under the HCP is a positive commitment to conservation of the spotted owl. The Service agrees. Dispersal habitat is important in the Mineral Block area, which includes Murray's ownership, because that it will aid in dispersal of juvenile owls between HCAs to the west and east of the Murray property, and it should also assist in owl movement between populations on the Olympic Peninsula and the Cascade Mountains of Washington.
3. A comment was received stating that the HCP does not include all the conservation measures on Murray Pacific ownership needed to recover the owl according to the Draft Recovery Plan, and that conservation measures on other lands will be necessary. As noted above in the Analysis of Effects section, the Service recognizes that all the goals in the Draft Recovery Plan are not met by the HCP; however, the HCP does make a significant contribution to one of the recovery recommendations (dispersal habitat), and the mitigation measures in the HCP are adequate to offset the loss of suitable owl habitat.
4. One reviewer commented that habitat conditions conducive to dispersal by spotted owls is not well understood, that the HCP was experimental, and that since our understanding of dispersal habitat will be subject to change as more information becomes available, the HCP should consider new information. The Service used the best scientific information available when evaluating the dispersal habitat proposed under the HCP, and believes that it meets the current concepts of what should comprise suitable dispersal habitat. There are monitoring and amendment procedures established in the HCP and IA to deal with unforeseen circumstances, which will allow for modifying the HCP if there is evidence that the proposed habitat will not meet the requirements of dispersing owls. The HCP was modified to formally include the review of pertinent research in the HCP evaluation process.

5. A concern was expressed by one reviewer that the HCP does not provide a role for State agencies in the HCP evaluation process. The Service recognizes its role as a cooperator with State agencies under the Act. The HCP was modified to specifically state that the Service will be responsible for coordinating HCP implementation with the appropriate State agencies.
6. One comment was received that the cost estimates presented in the HCP should be clarified with respect to costs over and above normal forest management costs. Costs presented in the HCP are Murray's "best estimate" for HCP implementation. The HCP was modified to provide more detail on the cost breakdown. For example, estimates for fertilization and pruning assume that these techniques are proven effective at aiding production of dispersal habitat.
7. One reviewer suggested that more detail be provided concerning specifics such as how and where snags, trees, and downed wood would be left, and detail on stands that will have harvest deferred beyond economic rotation age. The HCP was modified to provide more detail on placement of downed wood. It is difficult to provide accurate estimates concerning the amount of Murray's ownership that will have a deferred harvest. The Service believes that the mitigation requirements set in the HCP of dispersal habitat acreage, reduction of gap between dispersal habitat stands, and the Dispersal Landscape Index will require that Murray defer harvest on enough acreage to meet dispersal habitat goals set in the HCP. An amendment process for the HCP to deal with unforeseen circumstances has been established.
8. A comment was received that expressed concern about impacts the HCP will have on species other than the spotted owl. Impacts to other species are discussed in the EA, and the Service concluded in its Finding of No Significant Impact that the impacts upon native species, including sensitive species, will be minimal. In addition, issuance of the permit for incidental take of northern spotted owls does not release Murray from compliance with all other Federal, State, and Local laws protecting species of fish and wildlife.
9. A concern was raised that under the HCP, dispersal habitat would be patchy, thus, requiring owls to constantly move to find adequate habitat. As designed in the HCP, an adequate level of dispersal habitat is created to allow juvenile owls habitat to travel from one HCA of suitable resident habitat to another. The HCP intent is not necessarily to provide resident habitat, but to aid dispersal of juvenile owls between HCA's.
10. A reviewer was concerned that the HCP allows harvest of suitable resident owl habitat. Under section 10(a)(1)(B) of the Act, incidental take of a listed species can be authorized if conditions specified in section 10(a)(1)(B)(2)(A) and (B) are met. The Service recognizes that under the Murray permit and HCP suitable

resident habitat will be harvested; however, the Service believes that the impacts will be adequately minimized and mitigated for and the conditions referenced above will be met.

### III. INCIDENTAL TAKE PERMIT CRITERIA - ANALYSIS AND FINDINGS

1. The taking of northern spotted owls will be incidental.

Any take of spotted owls will be incidental to the otherwise lawful activity of harvesting commercial timber by Murray.

2. Murray will, to the maximum extent practicable, minimize and mitigate the impacts of taking northern spotted owls.

The HCP and IA, developed by Murray in coordination with the Service, contain measures intended to minimize and mitigate the impact of take of spotted owls which is authorized under the permit.

Impacts of taking will be minimized by Murray surveying for, and providing seasonal protection within 1/4 mile of any active spotted owl nest between 1 March and 30 September that is located on their property. The mitigation measures contained in the HCP and IA include provisions to compensate for the loss of marginal, fragmented suitable spotted owl resident habitat, through habitat reserves protected from timber harvest and management of Murray's entire ownership for an increasing amount of dispersal habitat for use by juvenile owls. The amount of owl dispersal habitat will be increased from the current level of 11,412 acres to approximately 23,233 acres by the year 2043, and maintained at an average of 23,000 acres through 2093.

3. Murray will ensure that adequate funding for the HCP and procedures to deal with unforeseen circumstances will be provided.

The HCP and IA specify the funding provided by Murray, and show that Murray has the ability to assure funding for the HCP through timber harvest revenues. The IA contains provisions for amendments that can be used in the event of any unforeseen circumstances.

4. The taking will not appreciably reduce the likelihood that the species will survive and recover in the wild.

The Act's legislative history establishes the intent of Congress that this issuance criteria be identical to a finding of "not likely to jeopardize" under section 7(a)(2) [see 50 CFR 402.02]. As a result, approval of Murray's permit application has also been reviewed by the Service under section 7 of the Act. In a biological opinion, which is attached hereto and incorporated by reference, the Service concluded that the approval of Murray's application for an incidental take permit would not be likely to jeopardize the continued existence of the northern spotted owl.

5. Other measures, as required by the Director of the Fish and Wildlife Service, have been met.

The HCP and IA incorporate all elements necessary for the issuance of the permit.

6. The Director of the Service has received the necessary assurances that the plan will be implemented.

Signing of the IA by all parties will assure that the HCP will be implemented. Restrictions on Murray's management of their land to accomplish the objectives of the HCP have been recorded, and run with the land so as to bind any successor to Murray.

7. Alternatives.

The proposed action and alternatives described in the attached EA were based upon the intent and objectives of the HCP and the ongoing strategies of the Service and State of Washington for the conservation of the northern spotted owl. Four alternatives were considered (including the proposed action and no action alternatives), and three of these were rejected. A description of the alternatives is contained in the attached EA. The EA is incorporated into this document by reference.

1. Proposed Action

The proposed action is discussed in detail above under Description of Proposal.

2. No Action

Under the No Action alternative, the incidental take permit would not be issued and the proposed project would not occur. Murray would not harvest any suitable spotted owl habitat within the 1.8 miles of the known activity centers on or near its ownership. Murray would harvest non-suitable habitat within the home range circles, and habitat of all types outside these circles. Should any of the activity centers be abandoned by owls in the future, harvest of suitable habitat would resume. Given the small amount of suitable habitat currently present within the home range circles, and the fragmented nature of the habitat that is present, abandonment is a real possibility. No conscious effort would be made to create or maintain dispersal habitat on the Murray ownership, although dispersal habitat would exist both within the protected resident habitat and near the end of each commercial rotation in second-growth stands managed solely for timber production. There would be approximately 17,000 acres of owl dispersal habitat available by the year 2043 under the No Action alternative. This dispersal habitat, created incidental to timber management, would likely be in larger, more widely spaced patches

than dispersal habitat created under the Proposed Action, since there would be no specific effort to adjust harvest size and spacing to meet owl requirements. This alternative was not selected because it would result in a loss of commercial timber that would significantly reduce Murray's operating income over the next decade, making an economically non-viable option for the company, and, from the Service's standpoint, there would be no significant improvement toward the spotted owl recovery goal of increasing dispersal habitat.

### 3. Two Other Alternatives Considered

The third alternative is similar to the No Action alternative, except that the area to be protected from timber harvest would be reduced to 500 acres within 1/2 mile of each owl activity center. The best 70 acres of habitat surrounding each activity center would be protected as part of the 500 acres. The impacts of this alternative would be similar to those of the No Action alternative, except that fewer acres of suitable habitat would be protected, and the chance of owls abandoning the circles would be greater. The ownership would contain approximately 15,310 acres of dispersal habitat in 2043 under this alternative.

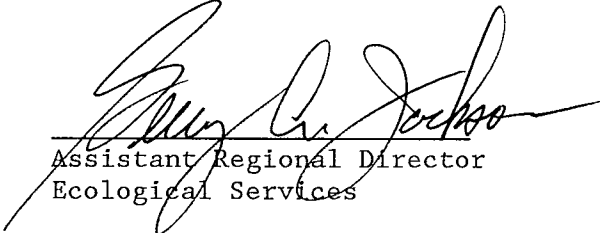
The fourth alternative would be the protection and maintenance of suitable spotted owl habitat on Murray lands within DCA WD-10. Approximately 4,574 acres of Murray land occurs within the boundaries of DCA WD-10, of which 296 acres are suitable habitat. Under alternative four, the 296 acres would be protected from harvest and the remaining 4,278 acres would be allowed to develop into suitable habitat. This could, over several decades, contribute to supporting two or more reproductive owl pairs. Suitable spotted owl habitat on Murray ownership outside DCA WD-10 would be harvested, and no attempt would be made to manage for dispersal habitat as under the Proposed Action.

## IV. GENERAL CRITERIA AND DISQUALIFYING FACTORS - ANALYSIS AND FINDINGS

The Service has no evidence that the permit application should be denied on the basis of the criteria and conditions set forth in 50 CFR 13.21(b)-(c).

## V. RECOMMENDATION ON PERMIT ISSUANCE

Based on the foregoing findings with respect to the proposed action, I recommend issuance of a permit to authorize incidental taking of northern spotted owls by Murray in accordance with the HCP and the IA.

  
Assistant Regional Director  
Ecological Services

9/24/93  
Date



### References

- Lujan M., Jr., D.R. Knowles, J. Turner, and M. Plenert. 1992. Draft recovery plan for the northern spotted owl. USDI - Fish and Wildlife Service, Portland, Oregon.
- Murray Pacific Corporation. 1993. Habitat conservation plan for the northern spotted owl (Strix occidentalis caurina) on timberlands owned by the Murray Pacific Corporation, Lewis County, Washington. Prepared by Beak Consultants, Inc., Kirkland, Washington.
- Thomas, J.W., E.D. Forsman, J.B. Lint, E.C. Meslow, B.R. Noon, and J. Verner. 1990. A conservation strategy for the northern spotted owl. Interagency Scientific Committee to Address the Conservation of the Northern Spotted Owl, Portland, Oregon.
- U.S. Department of Agriculture, U.S. Department of the Interior, National Oceanic and Atmospheric Administration, and the Environmental Protection Administration. 1993. Forest Ecosystem Management: Ecological, Economic, and Social Assessment. A Report of the Forest Ecosystem Management Assessment Team. July 1993. Portland, Oregon.
- U.S. Fish and Wildlife Service. 1993. Environmental assessment for the proposed issuance of a permit to allow the incidental take of the northern spotted owl [a threatened species under section 10(a) of the Endangered Species Act of 1973, as amended] on Murray Pacific lands in Lewis County, Washington. Prepared by Beak Consultants, Inc., Kirkland, Washington.